

Name:_____

Math 121

Self-Assessment Quiz #4

March 17, 2021

- Please see the course webpage for the answer key.

1. Compute $\int \frac{x^4 - 2x^3 + 4x^2 - 17x + 10}{x^3 - 3x^2 + 2x - 6} dx = \int \frac{x^4 - 2x^3 + 4x^2 - 17x + 10}{(x-3)(x^2+2)} dx.$

2. Compute $\int \frac{x+7}{x^2+6x+14} dx.$

3. Compute $\int_2^\infty \frac{x}{e^{3x}} dx.$

4. Compute $\int_3^\infty \frac{7}{x^2+3x-10} dx.$

5. Compute $\int_8^\infty \frac{1}{x^2-10x+28} dx.$